Application help

Which drilling tool should be used for which kind of pipe?

kind of pipe	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223
case iron pipe without a jacket	●	●	●	●	●		
cast iron pipe outside with PE-jacket	●	●	●	●	●		
cast iron pipe with cement inside and outside	●	●		●			
product „Fuchs“-pipe with cement inside and outside	●	(●)		●			
steel pipe with cement inside	●	(●)		●			
steel pipe without a jacket		(●)	●	●	●		
steel pipe outside with PE-jacket		(●)	●	●	●		
asbestos cement pipe	●	●	(●)				
PVC-pipe						●	
PE-HD-pipe							●
fiber glass reinforced pipe	●	●	●	●			

(●) with reservation suitable

This table is just a suggestion that is prepared to the best knowledge and our experience. But that is not bindingness, cause the pipes make also changes and devolopments too, on that we have no bearing. In case of doubt please ask us concrete, we inform you gladly.

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EWE- Tapping- Tools

Tapping tools are also components of our EWE-tapping-system. They facilitate the tapping under pressure without any additional special tools. Our range of supply offers two tapping machines for the individual tapping of all kind of pipes for water PN 16 and gas PN 4:

- EWE-topping-machine for asbestos cement, cast-iron, steel and poly ethylene pipes, easy-going forward feed by incapsulated ball bearing.
- EWE-mini-tapping-machine for polyvinyl chloride pipes, automatic for ward feed.

Both tapping machines have direct connection on the EWE tapping fittings (type 32, G 1 1/2", left-handed thread). They provide a dry and "gas-free" tapping due to double O-ring sealing at the drill spindle and O-rings at the thread connections to the tapping fitting - to the rinsing fitting when water.

Drills and milling cutters are individually coordinated with the pipe material. Drills have a through wrench head for drilling chips. Milling cutters have a light internal thread to hold the milled piece. Punches also securely hold the piece punched out.

When tapping supply lines the rinsing of drilling ships is of great importance. Therefore, the EWE-topping-system offers for each tapping fitting the suitable rinsing fitting.

Self-sealing O-rings at all threads and GEKA hose connections are just as natural as a shut-off device for interrupting rinsing.

Transition pieces for EWE-tapping fittings of the size G 1 1/4" and G 2", mounting wrenches for EWE-tapping machines as well as automatic action and ratchet for the drill spindle complete our tapping tool selection.

We offer a transportation box made of lacquered steel metal sheeting with various divisions for each required accessory or a simple plastic box for the complete tapping equipment.

Advice and help before your first tapping are just as natural as service, repairs or work up of EWE-tapping tools.

Operating instructions

for the EWE-tapping-tool

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Basic Rules for Tapping of Supply Lines (Main pipes)

When tapping supply lines all relevant DIN and DVGW regulations must be observed and should be.carried out by experts only.

Generally, it has to be proceeded in accordance with the following "rules of technique":

- The supply lines must be subject for a pressure test before tapping (for instance for PN 10 test pressure 15 bar).
- The tapping fittings should be mounted on pipes only, which are under working pressure. Tappings always take place in pipe trenches.
- Generally, tappings must be carried out under pressure. Thorough rinsing prevents the remaining of drilling chips in the supply pipe.
- When mounting tapping fittings all regulations of tapping fitting manufacturers as well as pipe producers must be observed, especially for welded tapping fittings.
- Screw connections or wedges must be equally tightened. Checking the right position of the seal between supply line and tapping fitting, if needed you should carry out a pressure test on the outgoing side.
- Absolutely cleanness is necessary, for instance when mounting the tapping fitting on the main pipe and when using screws made of stainless steel.
- It is very important to use suitable tapping tools.
- Faultless and sharp drills, milling cutters etc. should be used only (maybe resharpen first); otherwise the supply line could be damaged.
- The pipe-trench has to be back-filled - especially in the area of the fitting - by experts only.

Please ask for advice of one of our experts before tapping with our EWE-tapping fittings first time.

Operating instructions for the EWE-tapping-tool

suitable for asbestos cement, cast-iron, steel, polyethylene and polyvinyl chloride pipes

1. Both fixing screws of the tapping machine must be loosed. The feed drum must brought to the start position by left-handed turning to the limit stop.

2. Drill, punch or milling cutter – depending of the material of the pipe – must be screwed on the drill spindle.

3. The EWE-tapping-machine has to be screwed in the tapping fitting (left-handed thread!) and with the help of the key bow tighten.

4. Drill spindle with drill has to be put carefully on the pipe. Both fixing screws mutually tighten.

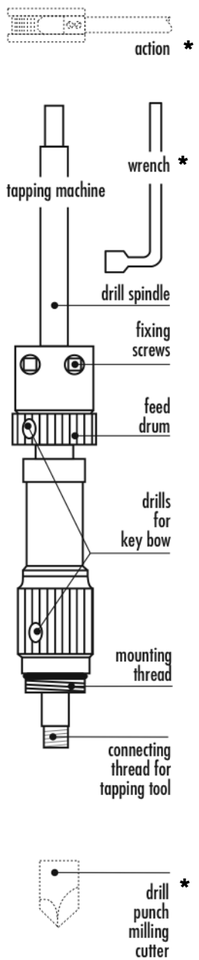
5. Automatic action (ratchet or driving action) has to be put on the drill spindle. The key bow must put in one of the holes of the feed drum. When tapping the working instructions for tapping fittings must be observed!

6. The rinsing fitting must be open. One hand operates the automatic action; the other hand has to give the necessary forward feed by means of right-handedturning of the wrench until the pipe wall is completely drilled.

7. During sufficient rinsing the drill spindle has to be pulled up to the limit stop. Therefore, both fixing screws must be loosed. ATTENTION! The drill spindle can come up of a sudden due to the water pressure.

8. The rinsing fitting has to be shut-off in consideration of the working instructions of the tapping-machine. The EWE-tapping machine has to be taken off and the top of the valve of the tapping fitting must be mounted with care.

9. The drill spindle has to be pulled back completely and the fixing screws have to be tighten. The risk of injury or damage of the drill, punch or milling cutter is reduced.



Operating instructions for the EWE-Mini tapping tool suitable for PE- and PVC-pipes

1. The locking screw must be loosen and the feed drum must be turned as far as the upper designation at the top of the body of the EWE-Mini tapping tool to bring it in the initial position.

2. Appropriate the pipe material the milling cutter or drill cutter has to be screwed on the connection thread for the drilling tool and after that the bore rod has to be pulled out completely.

3. The EWE Mini tapping tool isscrewed in the drill fitting (attention: it s a left hand thread!) and after that with the grip of wrench of the tapping tool wich is put in the drilling it has completely to pull tightly.

4. The bore rod with the drill cutter resp. milling cutter is put on the pipe and the locking screw at the drill fitting tool is pulled tightly with the tapping tool wrench.

5. The drive (ratchet or motor drive) is put on the bore rod and then drill. auxiliary shut-off of the valve has to be in position “open”. It must be noticed the operating instruction and the installation instruction of the tapping fitting always! By turning right, the pipe wall will be cut through. In this connection the drill feed is carried out automatically. The drill operation will be finished when the pipe wall is completely cut through.

6. The sufficient flushing is only needed in case of PVC-drilling, and following the bore rod has to be wind up as far as it will go. Therefore the locking screw must be loosen. Attention, because of the water pressure the bore rod can abruptly bounce up!

7. By considering the installation instruction from the tapping fitting please close the auxiliary shut-off. The EWE-Mini tapping tool has to be detached and the top of the tapping valve from the drill fitting has to be mounted stationary.

8. The PE- or PVC-piece out of the drill cutter resp. milling cutter should be pushed out first directly before the next drilling! The pushing out happens after the dropping from the drilling tool with an pushing-out device, the drill cutter or milling cutter will be screwed on that.

9. The bore rod has to be pulled up and the locking screw has to be tightened. The danger of injury and the risk of damage of the drill or milling cutter have to be impaired.

*** do not contain in the scope of supply, please order separately!**